



April 15, 2016

Michelle Kaysen  
USEPA Region 5, Mail Code LU-9J  
77 West Jackson Boulevard  
Chicago, IL 60604

RE: First Quarter 2016 Progress Report, Hartford Petroleum Release Site

Dear Ms. Kaysen,

212 Environmental Consulting, LLC (212 Environmental) is submitting this quarterly report summarizing the progress and status of activities performed at the Hartford Petroleum Release Site (Hartford Site) on behalf of Apex Oil Company, Inc. (Apex) for the time period from January 1, 2016 to March 31, 2016.

1. The following deliverables were submitted by Apex during the first quarter 2016:
  - The *Fourth Quarter 2015 Sentinel Well Monitoring Summary Report* was submitted to the United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (Illinois EPA) on January 8, 2016 via standard mail.
  - The *Fourth Quarter 2015 Progress Report* was submitted to the USEPA and the Illinois EPA on February 5, 2016 via email.
2. The following requests and notifications pertaining to activities at the Hartford Site were submitted by Apex during the first quarter 2016:
  - The USEPA and Illinois EPA were provided a response to a request for additional in-home effectiveness monitoring within seventeen structures following the completion of river stage triggered monitoring event (EBMP-28) on January 5, 2016.
  - The USEPA and Illinois EPA were provided a summary of the additional in-home effectiveness monitoring within seventeen structures following the completion of the river stage triggered monitoring event (EBMP-28) on January 7, 2016.
  - The USEPA and Illinois EPA were provided notification regarding a total organic vapor concentration measured within a sub-slab vapor probe located at 309 North Olive Street that exceeded the 350 parts per million by volume (ppmv) threshold during the first quarter in-home effectiveness monitoring event and the actions taken in response to the measurement on February 9, 2016.
  - The USEPA and Illinois EPA were provided notification regarding a total organic vapor concentration measured within a sub-slab vapor probe located at 507 North Delmar Avenue that



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- exceeded the 150 ppmv notification criteria during the first quarter in-home effectiveness monitoring event and the actions taken in response to the measurement on February 12, 2016.
- The USEPA and Illinois EPA were provided a summary of the methods that would be used during the enhanced total phase extraction test on February 23, 2016.
  - The USEPA was provided notification of the initiation of the enhanced total phase extraction test conducted in soil vapor extraction (SVE) Effectiveness Zone 6 on March 2, 2016.
  - The USEPA was provide a summary of the enhanced total phase extraction test conducted in SVE Effectiveness Zone 6 on March 7, 2016.
3. Apex participated in the following meetings and teleconferences during the first quarter 2016:
- The Third Community Focus Group meeting with the USEPA, Illinois EPA, and invited stakeholders was convened on February 9, 2016.
4. Apex completed the following in-home effectiveness monitoring activities:
- Weekly in-home effectiveness monitoring was performed within nine structures at the Hartford Site during the first quarter 2016.
  - In-home effectiveness monitoring was performed within 17 structures at the Hartford Site at the request of the USEPA following the completion of the river stage triggered monitoring event (EBMP-28) on January 6, 2016.
  - Quarterly in-home effectiveness monitoring was performed within 29 structures at the Hartford Site between February 8 and 11, 2016.
5. Apex completed the following dissolved phase investigation activities:
- Quarterly manual fluid level gauging within 376 groundwater monitoring wells and multipurpose monitoring points was completed between January 5 and 7, 2016.
  - Monthly manual fluid level gauging within select groundwater monitoring wells and multipurpose monitoring points was completed on February 1 and March 28, 2016.
  - Groundwater samples were collected and analyzed from the five sentinel monitoring wells on March 29, 2016.
6. Apex completed the following SVE system operations, maintenance, and monitoring (OMM) activities during the first quarter 2016:
- Routine monitoring within vapor collection system components were conducted during the first quarter 2016 including: (1) fluid level gauging; (2) measurements of vacuum, air flow, and temperature; and (3) screening total organic vapor concentrations within operating SVE wells.



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- Routine operations within the vapor collection system components were conducted during the first quarter 2016 including adjustments to stingers and valve positions within individual wells, as well as sweeping of the horizontal transmission lines to remove accumulated groundwater.
- Effectiveness monitoring for the SVE system was conducted within 135 nested soil vapor monitoring wells and multipurpose monitoring points between February 2 and 7, 2016.
- An enhanced total phase extraction test was conducted using three SVE wells (HSVE-057, HSVE-059, HSVE-060) located within SVE Effectiveness Zone 6 between March 1 and 11, 2016.
- Routine OMM of the thermal treatment system components continued during the first quarter 2016.
- A new server for the thermal treatment systems was brought on-line by Apex on February 16, 2016.

7. Activities planned during the second quarter 2016 at the Harford Site:

- Conduct routine OMM of the vapor collection and thermal treatment components of the SVE system in accordance with the approved Vapor Collection System Operation, Maintenance, and Monitoring Plan (Trihydro 2015) and HSVE Monitoring and Maintenance Manual (URS 2014).
- Conduct quarterly effectiveness monitoring within the multipurpose monitoring points and soil vapor monitoring wells in accordance with the approved Effectiveness Monitoring Plan (URS 2014) in May 2016.
- Conduct quarterly in-home effectiveness monitoring in May 2016 in accordance with the Final Interim In-Home Effectiveness Monitoring Plan (Trihydro 2014).
- Continue weekly in-home effectiveness monitoring within nine structures in accordance with the Final Interim In-Home Effectiveness Monitoring Plan (Trihydro 2014).
- Conduct river stage triggered monitoring in accordance with the triggers established within the Final Interim In-Home Effectiveness Monitoring Plan (Trihydro 2014).
- Continue dissolved phase investigation activities in accordance with the Final Dissolved Phase Investigation Work Plan (Trihydro 2013) including: (1) monthly and quarterly fluid level gauging, (2) groundwater sampling, and (3) data reduction, analysis, and reporting.
- Conduct quarterly groundwater monitoring of the five sentinel monitoring wells located south of the Hartford Site in June 2016.
- Coordinate and participate in the fourth community focus group meeting to be held within the Village of Hartford on April 26, 2016.
- Participate in routine teleconferences and meetings with the USEPA and Illinois EPA.



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We appreciate your continued engagement with this project. If you have any questions or require any additional information, please contact me at (513) 430-1766.

Sincerely,

Paul Michalski, P.G.  
Senior Hydrogeologist

cc: James F. Sanders, Apex Oil Company, Inc.  
Tom Miller, Illinois Environmental Protection Agency  
Chris Cahnovsky, Illinois Environmental Protection Agency